

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A propeller shaft assembly comprising:
a tubular member having an outer surface defined by an invariable outside diameter and an inner surface defined by an invariable inside diameter; and
a tubular support member constructed of an open-cell foam disposed within ~~the~~ said tubular member and having an inner surface defined by an invariable inside diameter, ~~the~~ said inner surface forming a cylindrical, empty cavity within ~~the~~ said tubular member, and an outer surface defined by an invariable outside diameter, ~~the~~ said outer surface engaging ~~the~~ said inner surface of ~~the~~ said tubular member ~~to increase a bending frequency of the~~ for the propeller shaft assembly[.];
wherein said open-cell foam is impregnated with one of a resin and a cement.
2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) An assembly according to claim 1 wherein said tubular support member includes a plurality of openings formed along ~~the~~ a length (L1) of said tubular support member for reducing the weight of ~~the~~ said tubular support member.
5. (Currently Amended) An assembly according to claim 1 wherein said open-cell foam is generally flexible before being impregnated with ~~the~~ one of said resin ~~or~~ and said cement.
6. (Currently Amended) An assembly according to claim 1 wherein said tubular member comprises one of a metal or and a reinforced plastic.
7. (Previously Presented) An assembly according to claim 1 wherein said tubular member has a length (L2) greater than a length (L1) of said tubular support member.

8. (Cancelled)
9. (Currently Amended) A torque transmission shaft comprising:
a metal tube having an outer surface defined by an invariable outside diameter and an inner surface defined by an invariable ~~uniform~~ inside diameter; and
a tubular support member co-axially located within said metal tube and having an inner surface defined by an invariable inside diameter, ~~the~~ said inner surface forming a cylindrical, empty cavity within said metal tube, and an outer surface defined by an invariable outside diameter, ~~the~~ said outer surface engaging ~~the~~ said inner surface of said metal tube, said ~~tubular~~ support member comprising a rigid foamed plastic extending along a length of said metal tube.
10. (Currently Amended) A torque transmission shaft according to claim 9 wherein ~~the~~ said support member has a first length (L1) and said metal tube has a second length (L2) and the ratio L1/L2 is less than 1.0.
11. (Currently Amended) A torque transmission shaft according to claim 9 wherein ~~the~~ said support member includes a plurality of openings formed along a first length (L1) for reducing the weight of ~~the~~ said support member.
12. (Currently Amended) A torque transmission shaft according to claim 9 wherein said support member comprises an open cell foamed plastic impregnated with one of a resin ~~or~~ and a cement.
13. (Currently Amended) A torque transmission shaft according to claim 12 wherein said open-cell foamed plastic is generally flexible before being impregnated with one of said ~~the~~ resin ~~or~~ and said cement.

14. (Currently Amended) A method of producing a rigid torque transmission shaft comprising:

providing a ~~metal or reinforced plastic~~ tube having an outside surface defined by an invariable outside diameter and an inner surface defined by an invariable inside diameter; and

introducing a tubular support member co-axially within said tube, said ~~tubular~~ support member having an inner surface defined by an invariable inside diameter, ~~the said~~ inner surface forming a cylindrical, empty cavity within said tube, and an outer surface defined by an invariable outside diameter to engage ~~an said interior~~ inner surface of said tube, said support member comprising a rigid foamed plastic extending along a length of ~~the said tubular member~~ tube [(.)];

wherein said tube is one of a metal and a reinforced plastic.

15-19. (Cancelled)

20. (Previously Presented) An assembly according to claim 1 wherein said tubular member has a thickness generally less than 8 mm.

21. (Currently Amended) An assembly according to claim 1 wherein ~~the said~~ outer diameter of ~~the said~~ tubular member is generally greater than 40 mm and is generally less than 300 mm.

22. (Cancelled)

23. (Currently Amended) A torque transmission shaft according to claim 9 wherein ~~the said~~ support member has a first length (L1) and said metal tube has a second length (L2) and the ratio L1/L2 is greater than 0.25.

24. (Currently Amended) An assembly according to claim 1 further comprising a connecting member fixed to each end of ~~the said~~ tubular member.

25. (Currently Amended) An assembly according to claim 1 wherein ~~the said~~ outside diameter of ~~the said~~ tubular support member is greater than or equal to ~~the said~~ inside diameter

of ~~the~~ said tubular member such that ~~the~~ said tubular support member engages ~~the~~ said tubular member via interference fit.

26. (Currently Amended) an assembly according to claim 7 wherein ~~the~~ said ratio $L1/L2$ is not less than 0.25 and not greater than 1.0.

27. (Cancelled)

28. (Previously Presented) A torque transmission shaft according to claim 9 further comprising a joint element or stub shaft fixed to each end of said metal tube.

29. (Currently Amended) A torque transmission shaft according to claim 9 wherein ~~the~~ said outside diameter of ~~the~~ said-~~tubular~~ support member is greater than or equal to ~~the~~ said inside diameter of ~~the~~ said ~~tubular member~~ metal tube such that ~~the~~ said ~~tubular~~ support member engages ~~the~~ said ~~tubular member~~ metal tube via interference fit.

30. (Cancelled)

31. (Withdrawn) A method of producing a torque transmission shaft according to claim 14 wherein the outside diameter of the tubular support member is greater than or equal to the inside diameter of the tubular member such that the tubular support member is introduced via interference fit.

32. (Withdrawn) A method of producing a torque transmission shaft according to claim 14 wherein the tubular support member has a generally uniform thickness along its length.